



IAP12 Rec'd PCT/PTO 21 MAY 2007 CT

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

International Application No. : PCT/EP2004/012466
International Filing Date : November 4, 2004
U.S. Serial No. : 10/580,034
Deposit Date U.S. Nat'l Phase : May 19, 2006
Priority Date(s) Claimed : November 21, 2003
Applicant(s) : Matthias KUNTZ et al.
Title: METHOD FOR THE MODIFICATION OF CHIRAL LIQUID-CRYSTAL FILMS
WITH THE AID OF EXTRACTANTS

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS
UNDER 35 U.S.C. § 371
IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 11213-1450

Sir:

In response to the Notification of Missing Requirements dated March 20, 2007:

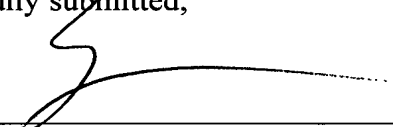
- ☒ Attached is a Declaration and Power of Attorney in compliance with 37 CFR § 1.53 along with the late filing surcharge of \$130.00
- ☒ Applicant(s) include an executed assignment and Recordation Form Cover Sheet with the recordation fee of \$40.00 (Check No. 39305).
- ☒ Attached is a copy of the Notification of Missing Requirements.
- ☐ Applicant(s) request that the time for taking action in this case be extended pursuant to 37 CFR 1.136(a) for a period of one/two/three/four/five month(s) along with the fee of .
- ☐ Applicant(s) are entitled to small entity status.
- ☐ Attached is a verified English translation of the PCT publication along with the fee of \$130.00.
- ☐ Attached is a Preliminary Amendment. 05/23/2007 GFREY1 00000003 10500034 130.00 OP
- ☐ Applicant(s) include the extra claims fee of \$ 01 FC:1617 for claims in excess of 20 per additional claim, for independent claims in excess of 3 per additional claim, and/or for multiple dependent claims.
- ☐ Attached is the Sequence Disclosure (paper/disk versions) with the appropriate

statement as required

- ☐ Attached is an Application Data Sheet (ADS).
- ☐ Attached are the substitute drawings as required.

Attached is a check in the amount of \$130.00. However, the Commissioner is hereby authorized to charge fees under 37 CFR § 1.16 and § 1.17 which may be required to facilitate this filing, or credit any overpayment to Deposit Account #13-3402.

Respectfully submitted,



Anthony J. Zelano
Registration No. 27,969
Attorney for Applicants

MILLEN, WHITE, ZELANO
& BRANIGAN, P.C.
Arlington Courthouse Plaza I
2200 Clarendon Blvd. Suite 1400
Arlington, Virginia 22201
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Facsimile: (703) 243-6410

Attorney Docket No.: MERCK-3193

Date: May 21, 2007

MAR 22 2007



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
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 Alexandria, Virginia 22313-1450
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U.S. APPLICATION NUMBER NO. 10/580,034	FIRST NAMED APPLICANT Matthias KUNTZ	ATTY. DOCKET NO. MERCK-3193
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INTERNATIONAL APPLICATION NO.

PCT/EP04/12466

I.A. FILING DATE 11/04/2004	PRIORITY DATE
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Millen, White, Zelano & Branigan, P.C.
 Arlington Courthouse Plaza 1
 2200 Clarendon Boulevard, Suite 140
 Arlington, VA 22201

ACTION

DUE DATE

MSG regnals
 5/20/07

CONFIRMATION NO. 9520

371 FORMALITIES LETTER

OC000000022955554

Date Mailed: 03/20/2007

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Copy of the International Application filed on 05/19/2006
- Copy of the International Search Report filed on 05/19/2006
- Preliminary Amendments filed on 05/19/2006
- Information Disclosure Statements filed on 05/19/2006
- U.S. Basic National Fees filed on 05/19/2006
- Priority Documents filed on 05/19/2006

DUE DATE

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web.
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

Done by
 [Signature]
 5/20/07

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebs>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

FRANCINE YOUNG

Telephone: (703) 308-9140 EXT 215

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/580,034	PCT/EP04/12466	MERCK-3193

FORM PCT/DO/EO/905 (371 Formalities Notice)

RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office(Rev. 10/02)
OMB No. 0651-0027 (exp. 6/30/2005)

PATENTS ONLY

To the Honorable Commissioner of Patent and Trademarks: Please record the attached documents or copy thereof.

1. Name of conveying party(ies):

KUNTZ, Matthias
HAMMOND-SMITH, Robert
RIDDLE, Rodney
PATRICK, John
UKELIS, Michael
SCHMITZER, Siegfried
SCHMITT, PeterAdditional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:

- ☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: October 9, 2006, October 9, 2006,
October 9, 2006, October 9, 2006, October 9, 2006,
October 9, 2006, October 9, 2006,

2. Name and address of receiving party(ies):

Name: Merck Patent GmbH
Street Address: Frankfurter Strasse 250
City: Darmstadt
Country: Germany Zip: 64293Name: KBA-Metronic AG
Street Address: Benzstrasse 11
City: Veitshoechheim
Country: Germany Zip: 97209Additional names(s) or address(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)
10/580,034

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: MILLEN, WHITE, ZELANO
& BRANIGAN, P.C.
Address: Arlington Court Plaza I
Suite 1400
2200 Clarendon BLVD.
Arlington, VA 22201

6. Total number of applications and patents involved: 1

7. Total fee (37CFR 3.41) \$40.00

- ☒ Enclosed
☐ Authorized to be charged to deposit account

8. DEPOSIT ACCOUNT NO. 13-3402

(Attach duplicate copies of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and Signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original.

Anthony J. Zelano, Reg. No. 27,969

Names of Person Signing

Signature

03/23/2007 OFFICE 00000000 10580034

May 21, 2007

Date

40.00 0P

Total number of pages including cover sheet, attachments, and documents 2

Attorney Docket No. MERCK-3193

ASSIGNMENT

ATTY. DOCKET NO. MERCK-3193

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement(s) relating to

METHOD FOR MODIFYING CHIRAL LIQUID CRYSTAL FILMS WITH THE AID OF EXTRACTING AGENTS

and for which one or more of the following apply:

- ☐ U.S. Provisional Application Serial No. was filed in the United States Patent and Trademark Office on
- ☒ A U.S. Non-Provisional

- ☐ application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date
- ☒ Application Serial No. 10/580,034 for Letters Patent was filed in the U.S. Patent and Trademark Office on May 19, 2006
- ☐ as International Application No. was filed on , designating the United States.

AND WHEREAS

Merck Patent GmbH
Frankfurter Strasse 250
64293 Darmstadt, Germany

KBA-Metronic AG
Benzstrasse 11
97209 Veitshoechheim, Germany

hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and all application(s) listed above, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.




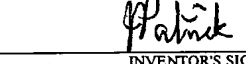
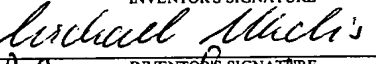
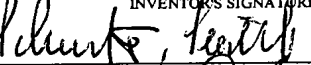

NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application(s), including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all U.S. (including provisional) or foreign priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto concerning said invention, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all earlier priority rights (U.S. and foreign), divisions and continuations thereof, any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, including the right to sue for damages occurring before the assignment, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.

AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection with filing said applications and securing Letters Patents thereon.

AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.

The undersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this assignment information which may be necessary or desirable in order for the United States Patent and Trademark Office to properly record this document.

IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR

201 FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
KUNTZ, Matthias		09.10.2006
202 FULL NAME OF SECOND JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
HAMMOND-SMITH, Robert		09.10.2006
203 FULL NAME OF THIRD JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
RIDDLE, Rodney		09.10.2006
204 FULL NAME OF FOURTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
PATRICK, John		09.10.2006
205 FULL NAME OF FIFTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
UKELIS, Michael		09.10.2006
206 FULL NAME OF SIXTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
SCHMITZER, Siegfried		09.10.2006
207 FULL NAME OF SEVENTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
SCHMITT, Peter		09.10.2006
208 FULL NAME OF EIGHTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
209 FULL NAME OF NINTH JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE